

LAND APPLICATION SITE

F W ABERNATHY SITE

DWFWA 1-3

DINWIDDIE COUNTY

RECYC SYSTEMS, INC

PART D-VI BIOSOLIDS APPLICATION AGREEMENT

This biosolids application agreement is made on 3-28-2011 between F.W. ABERNATHY JR referred to here as "landowner", and Recyc Systems, Inc, referred to here as the "Permittee"

Landowner is the owner of agricultural land shown on the map attached as Exhibit A and designated there as _____ ("landowner's land") Permittee agrees to apply and landowner agrees to comply with certain permit requirements following application of biosolids on landowner's land in amounts and in a manner authorized by (VPA) (VPDES) permit number _____ which is held by the Permittee

Landowner acknowledges that the appropriate application of biosolids will be beneficial in providing fertilizer and soil conditioning to the property and consents to the application of biosolids on his property Moreover, landowner acknowledges having been expressly advised that, in order to protect public health

1 Public access to landowner's land upon which biosolids have been applied should be controlled for at least 30 days following any application of biosolids and no biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols,

2 Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil, or 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation Other food crops, feed crops and fiber crops shall not be harvested for 30 days after the application of biosolids,

3 Following biosolids application to pasture or hayland sites, meat producing livestock should not be grazed or fed chopped foliage for 30 days and lactating dairy animals should be similarly restricted for a minimum of 60 days Other animals should be restricted from grazing for 30 days,

4 Supplemental commercial fertilizer or manure applications should be coordinated with the biosolids applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10 1-104 2 of the Code of Virginia to be supplied to the landowner by the permittee at the time of application of biosolids to a specific permitted site,

5 Tobacco, because it has been shown to accumulate cadmium, should not be grown on landowner's land for three years following the application of biosolids borne cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare)

6 Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the permitting authority

The landowner agrees to allow county officials access to the area of the property permitted for biosolids, whenever necessary, to complete site inspections related to the scheduled biosolids program

Permittee agrees to notify landowner or landowner designee of the proposed schedule for biosolids application and specifically prior to any particular application to landowner's land This agreement may be terminated by either party upon written notice to the address specified below

F.W. ABERNATHY JR
Landowner Signature

F.W. ABERNATHY JR
Landowner Print Name

(SAME)
Farm Operator Signature

F.W. ABERNATHY, JR.
Farm Operator Print Name

Permittee
Recyc Systems, Inc

Mailing Address 16215 MCKENNEY Highway

McLanney VA 23072

Phone: 804. 731-4275

Mailing Address

SAME

Phone:

Mailing Address

P O Box 562

Remington Virginia 22734

(540) 547-3300

FARM DATA SHEET

SITE NAME:	F W Abernathy Site	COUNTY:	Dinwiddle
OWNER:	F W Abernathy, Jr	OPERATOR:	F W Abernathy, Jr
OWNER'S ADDRESS:	16215 McKenney Highway McKenney, VA 23872	OPERATOR'S ADDRESS:	16215 McKenney Highway McKenney, VA 23872
OWNER'S TELEPHONE:	804-731-4275	OPERATOR'S TELEPHONE:	804-731-4275
GENERAL FARM TYPE:	Hay/Pasture	CELLPHONE:	
# CATTLE:	2 cows, 1 horse ,15+ goats	EMAIL:	
LAGOON or SLURRY:	None	LATITUDE/	36°56'46"
		LONGITUDE 1-2	77°37'24"
TOPO QUAD:	Cherry Hill		36°56'52"
			77°33'53"
COMMENTS			

F.W. Abernathy Site

[illegible]

RECYC SYSTEMS, INC

FIELD DATA SHEET

[illegible]

Report Number 11-318-0690

Account Number 70594



www.aleastern.com

A&L Eastern Laboratories, Inc

7621 Whitepine Road Richmond Virginia 23237 (804) 743 9401 Fax (804) 271 6446

Send To RECYC SYSTEMS INC
SUSAN TRUMBO
8455 WHITESHOP RD
CULPEPER VA 22701

Grower

F W ABERNATHY/DWFW
DINWIDDIE

Submitted By J B CRENSHAW

Farm ID

SOIL ANALYSIS REPORT

Analytical Method(s)

Mehlich 3

Date Received 11/14/2011

Date Of Analysis 11/15/2011

Date Of Report 11/16/2011

Sample ID Field ID	Lab Number	Organic Matter			Phosphorus				Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C E C
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Rate	Reserve ppm	Rate	ppm	Rate	ppm	Rate	ppm	Rate	ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
1 DWFWA 1	14434	17	L	76	53	H			11	VL	92	M	823	H			7.1		0.0	5.3
2 DWFWA 2	14435	25	L	92	69	H			22	VL	60	L	651	M			5.8	6.83	1.0	5.3
3 DWFWA 3	14436	14	L	72	53	H			118	H	106	H	605	H			7.3		0.0	4.5

DwFWA 3		Percent Base Saturation					Nitrate		Sulfur		Zinc		Manganese		Iron		Copper		Boron		Soluble Salts		Chloride		Aluminum	
Sample ID	Field ID	K	Mg	Ca	Na	H	NO ₃ N	S	Zn	Mn	Fe	Cu	B	SS	Cl	Al										
		%	%	%	%	%	ppm	Rate	ppm	Rate	ppm	Rate	ppm	Rate	ppm	Rate	ms/cm	Rate	ppm	Rate	ppm					
1	DwFWA 1	06	143	848		00																				
2	DwFWA 2	12	94	698		189																				
3	DwFWA 3	59	196	747		00																				

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low) L (Low) M (Medium) H (High), VH (Very High) ENR Estimated Nitrogen Release C E C - Cation Exchange Capacity

Explanation of symbols: % (percent) ppm (parts per million) lbs/A (pounds per acre) ms/cm (milli mhos per centimeter) meq/100g (milli equivalent per 100 grams) Conversions: ppm x 2 = lbs/A Soluble Salts ms/cm x 640 = ppm

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by A&L Eastern Laboratories, Inc.

by *Paucic McGroary*

Paucic McGroary

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Submitted By J B CRENSHAW
Farm ID

Date Received 11/14/2011

Date Of Report 11/16/2011

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
1 DwFWA 1	Adjust pH to 6.8	0	0.0				0						
2 DwFWA 2	Adjust pH to 6.8	0	1.5				20						
3 DwFWA 3	Adjust pH to 6.8	0	0.0				0						

Comments

Sample(s) 2

Apply dolomitic lime to raise pH and improve the magnesium level

If dolomitic lime is not used apply required magnesium with magnesium oxide Epsom Salts K-Mag or Sul-PO-Mag

The recommendations are based on research data and experience but NO GUARANTEE or WARRANTY expressed or implied concerning crop performance is made.

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Paucic McGroary

NUTRIENT MANAGEMENT PLAN IDENTIFICATION

Operator

F W Abernathy
16215 McKenney Hwy
McKenney, VA 23872
804-731-4275

Integrator None

Farm Coordinates

Easting 0, Northing 0, zone 17

Watershed Summary

watershed CU23
county Dinwiddie

Nutrient Management Planner

Recyc Systems Inc
Recyc Systems, Inc
P O Box 562
Remington, Virginia 22734
540 547 3300

Certification Code None

Acreage Use Summary

Total Acreage in this plan 36.5

Cropland	0	0
Hayland	3	36.5
Pasture	0	0
Specialty	0	0

Livestock Summary

Beef Cattle	0	0
Dairy Cattle	0	0
Poultry	0	0
Swine	0	0
Other	0	0

Manure Production Balance

	Imported	Produced	Exported	Used	Net
kgals	0	0	0	0	0
tons	0	0	0	0	0

Plan written 12/28/2011

Valid until 12/28/2011

Signature

Planner

date

THE PLANNER IS NOT STATE CERTIFIED

Nutrient Management Plan Balance Sheet
(Spring, 2012-Summer, 2013)
F W Abernathy
Planner Recyc Systems Inc.

Tract 91 Location Dinwiddie

(N = N based, 1P = P based, 1 5P = P based at 1 5 removal, 0P = No P allowed)

Field CFSA No /Name	Size (ac) Total/ Used	Yr	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosid Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes
1,2/DWFWA 1(N)	11/11	2012	Hay/Pasture	120-60-240	0/0				120-60-240	N/A		
3/DWFWA 2(N)	13/13	2012	Hay/Pasture	100-40-130	0/0				100-40-130	N/A		

Commercial Application Methods

br - Broadcast ba - Banded sd - Sidedress

Notes

Tract 966 Location Dinwiddie
 (N = N based, 1P = P based, 1 5P = P based at 1 5 removal, 0P = No P allowed)

Field CFSA No /Name	Size (ac) Total/ Used	Yr	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosid Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes
1,2/DWFWA 3(N)	13/13	2012	Hay/Pasture	120-60-160	0/0				120-60-160	N/A		

Commercial Application Methods

br - Broadcast ba - Banded sd - Sidedress

Notes

THE PLANNER IS NOT STATE CERTIFIED

F W Abernathy Narrative

This is F W Abernathy farm located in Dinwiddie County The farm consists of hay/pasture fields

This is a partial plan written for the purpose of obtaining a biosolids permit Biosolids applicaiton has not been shown since it is uncertain when a permit will be obtained The partial plan will be revised prior to biosolids application to obtain a target bioslids application rate

Soil Test Summary

Tract	Field	Acre	Date	P2O5	K2O	Lab	Soil pH	Lime Date	rec lime tons/Ac
91	DWFWA 1	11	2011-Fa	H- (53 P ppm)	L- (11 K ppm)	A&L MIII	7.1		
91	DWFWA 2	13	2011-Fa	H (69 P ppm)	L (22 K ppm)	A&L MIII	5.8		
966	DWFWA 3	13	2011-Fa	H- (53 P ppm)	M+ (118 K ppm)	A&L MIII	7.3		

Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
91	91/1,2	DWFWA 1	11	Mattaponi	IIIa	II	III	II	
	91/3	DWFWA 2	13	Herndon	IIIb	II	III	III	
966	966/1,2	DWFWA 3	13	Mattaponi	IIIa	II	III	II	

Yield Range

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	>170	>80	>64	>6	>4 0
II	150-170	70-80	56-64	4-6	3 5-4 0
III	130-150	60-70	48-56	<4	3 0-3 5
IV	100-130	50-60	40-48	NA	<3 0
V	<100	<50	<40	NA	NA

Farm Summary Report

Plan New Plan Spring, 2012 - Summer, 2013

Farm Name **F W Abernathy**
Location Dinwiddie
Specialist Recyc Systems Inc
N-based Acres 36.5
P-based Acres 0.0

Tract Name **91**
FSA Number 91
Location Dinwiddie

Field Name **DWFWA 1**
Total Acres 10.90 Usable Acres 10.90
FSA Number 1,2
Tract 91
Location Dinwiddie
Slope Class B Hydrologic Group C

Riparian buffer width 0 ft
Distance to stream 0 ft

Conservation Practices

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method Phosphorus Environmental Threshold (PET) method

Soil Test Results

DATE	PH	P	K		Lab
Fa-2011	7.1	H-(53 P ppm)	L-(11 K ppm)	A&L Mill	

Soils

PERCENT	SYMBOL	SOIL SERIES
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18	8B	Georgeville
82	12B	Mattaponi

Field Warnings

Crop Rotation

PLANTED	YIELD	CROP NAME
2012-Sp	2.5 ton	Hay/Pasture - No Till

Field Name **DWFWA 2**

Total Acres	13.10	Usable Acres	13.10
FSA Number	3		
Tract	91		
Location		Dinwiddie	
Slope Class	B	Hydrologic Group	B

Riparian buffer width 0 ft
Distance to stream 0 ft

Conservation Practices

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method Phosphorus Environmental Threshold (PET) method

Soil Test Results

DATE	PH	P	K		Lab
Fa-2011	5.8	H(69 P ppm)	L(22 K ppm)	A&L MIII	

Soils

PERCENT	SYMBOL	SOIL SERIES
4	8B	Georgeville
68	10B	Herndon
28	12B	Mattaponi

Field Warnings

Crop Rotation

PLANTED	YIELD	CROP NAME
2012-Sp	2 3 * ton	Hay/Pasture - No Till

Tract Name	966
FSA Number	966
Location	Dinwiddie

Field Name DFWA 3

Total Acres	12 50	Usable Acres	12 50
FSA Number	1,2		
Tract	966		
Location	Dinwiddie		
Slope Class	B	Hydrologic Group	C

Riparian buffer width 0 ft

Distance to stream 0 ft

Conservation Practices

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method Phosphorus Environmental Threshold (PET) method

Soil Test Results

DATE	PH	P	K		Lab
Fa-2011	7 3	H-(53 P ppm)	M+(118 K ppm)	A&L Mill	

Soils

PERCENT	SYMBOL	SOIL SERIES
27	12A	Mattaponi
73	12B	Mattaponi

Field Warnings**Crop Rotation**

PLANTED	YIELD	CROP NAME
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2012-Sp

2.5 ton

Hay/Pasture - No Till

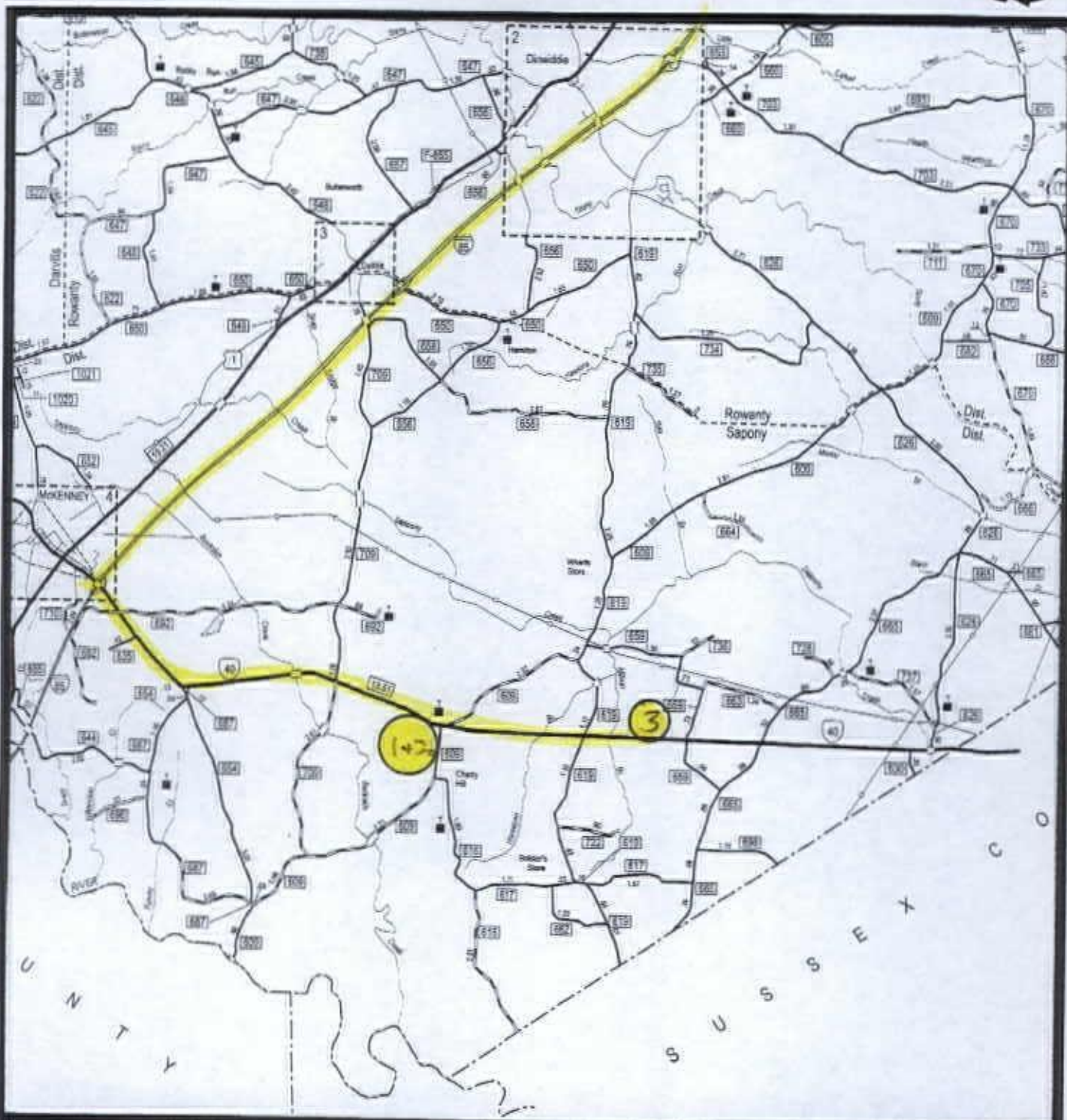


MAPS



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale:

1 inch = 2 miles

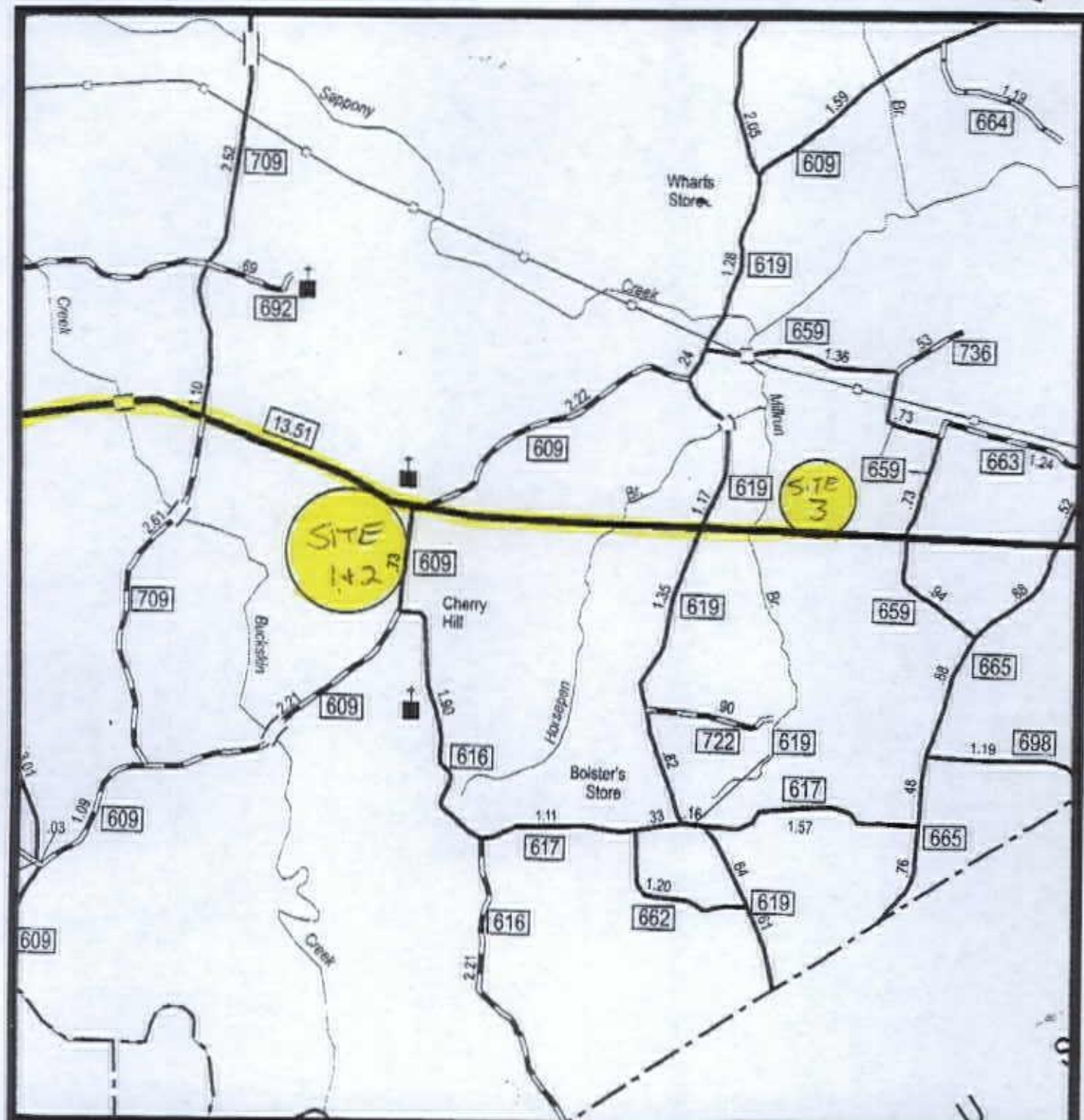
DWFWA 1-3

VICINITY MAP



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale:

1 inch = 1 mile

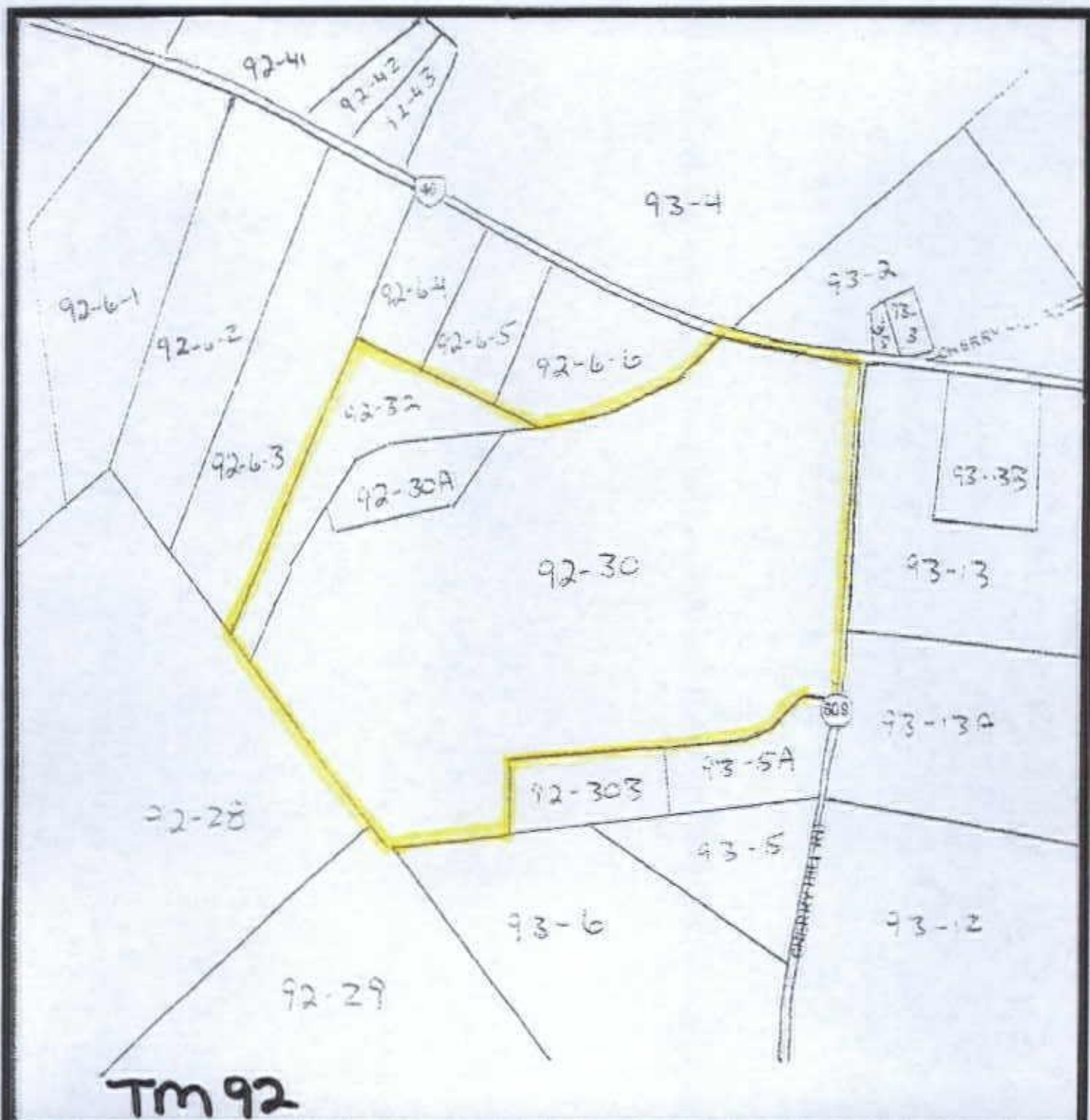
DWFWA 1-3

VICINITY MAP



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale:

1 inch = 660 feet

DWFWA 1-2

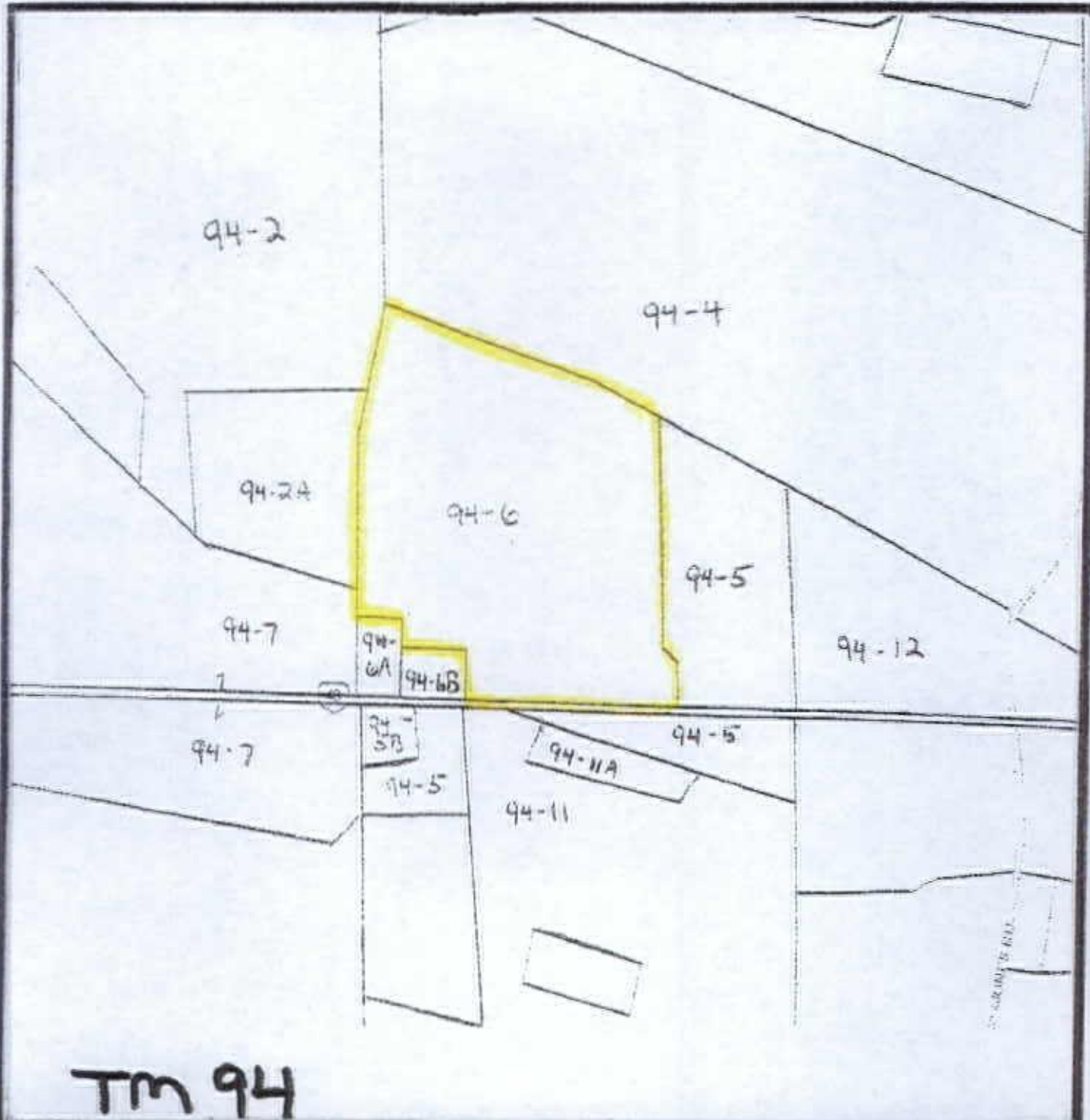
TAX MAP



Recyc SystemsTM

Inc.

(Biosolids Land Application)



Scale:

1 inch = 660 feet

DWFWA 3

TAX MAP



ADJOINING LANDOWNERS

F W ABERNATHY

DINWIDDIE COUNTY

Tax Map	Parcel #	Owner Name(s)
92	6-3	Boston L., III & Bernadette Bradley
	6-4	Charles A. & Hazel D. Watson
	6-5	Derrick L. Weatherbee
	6-6	Lynda St John
	28	Sandra B Harrison & Alice B. Spiers
	29	Sandra B Harrison & Alice B. Spiers
	30B	Roy Allen, Jr. & Mary Beth Stout
93	2	Joanne R. Cowden
	3A	Mt Olivet Cemetery Association
	4	William A. & Deborah F. Delatte
	5A	Roy Allen, Jr. & Mary Beth Stout
	6	David L. Barner, Jr.
	13	Mary E. Logue
	13A	American Towers Inc.
94	2	Delores M. Taylor
	2A	Patrick Henry & Mertie B. Griffin
	4	Sadie B. Marsh
	5	Maggie Branch Estate
	6A	Patrick Henry & Mertie B. Griffin
	6B	Count Of Dinwiddie
	7	Sandra B Harrison & Alice B. Spiers
	11	Thomas E. Johnson

Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale:

1 inch = 660 feet

DWFWA 1-2

SOIL MAP



Recyc SystemsTM

Inc.

(Biosolids Land Application)



Scale:

1 inch = 660 feet

DWFWA 3

SOIL MAP



Recyc SystemsTM Inc.

(Biosolids Land Application)



T91

Scale:

1 inch = 660 feet

DWFWA 1-2

AERIAL MAP





T966

Scale:

1 inch = 660 feet

DWFWA 3

AERIAL MAP



Legend for Site Plan



House and Well



Well / Spring



Perennial Streams & Surface



Wet Spot



Intermittent Stream / Drainage



Trees and Woods



Private Drive



Rock / Rocky Area



Sinkhole



Severely Eroded Spot



State Road



Field Boundary / Fence



Property Line

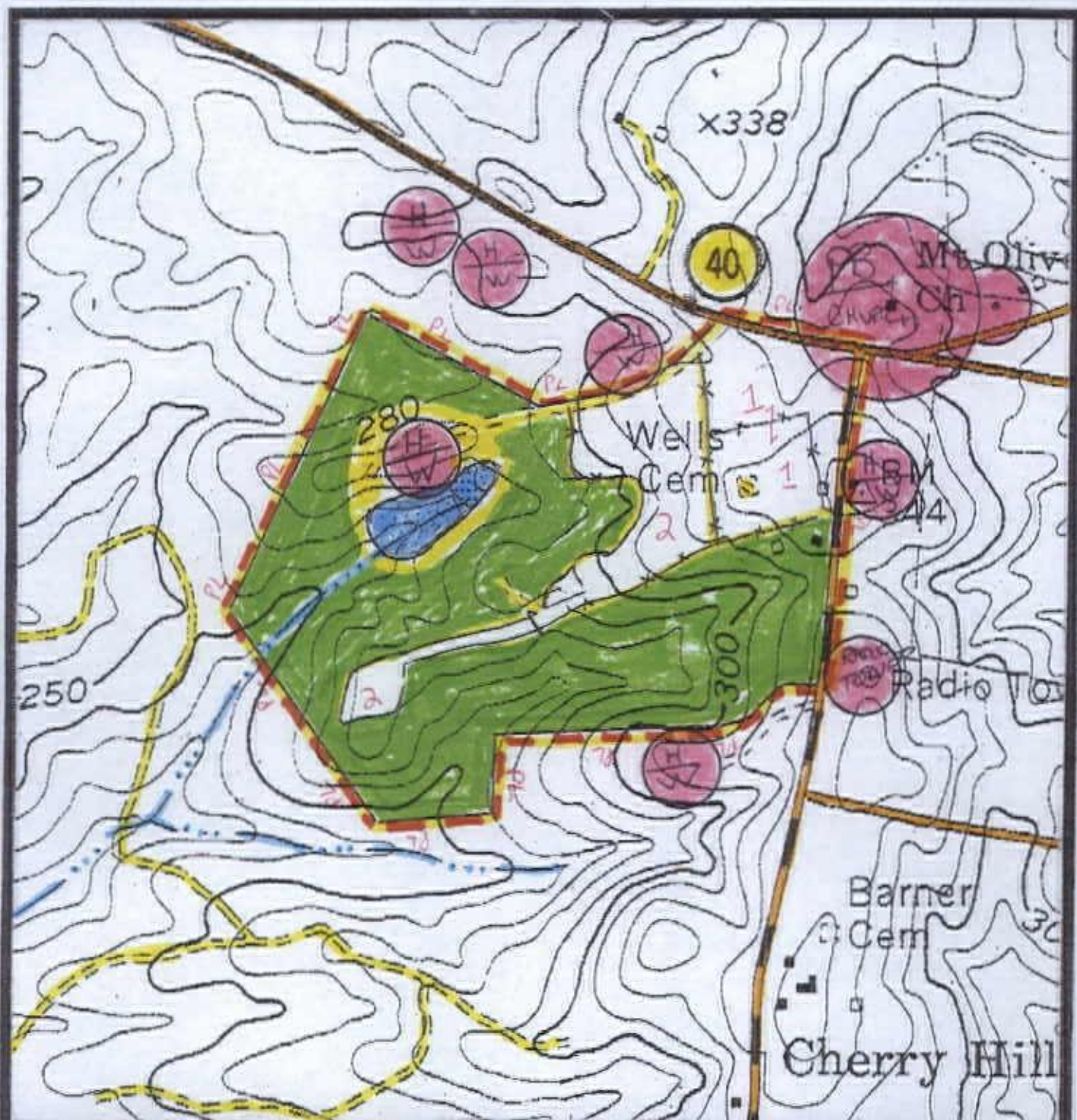


Slope



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(Biosolids Land Application)



Scale:

1 inch = 660 feet

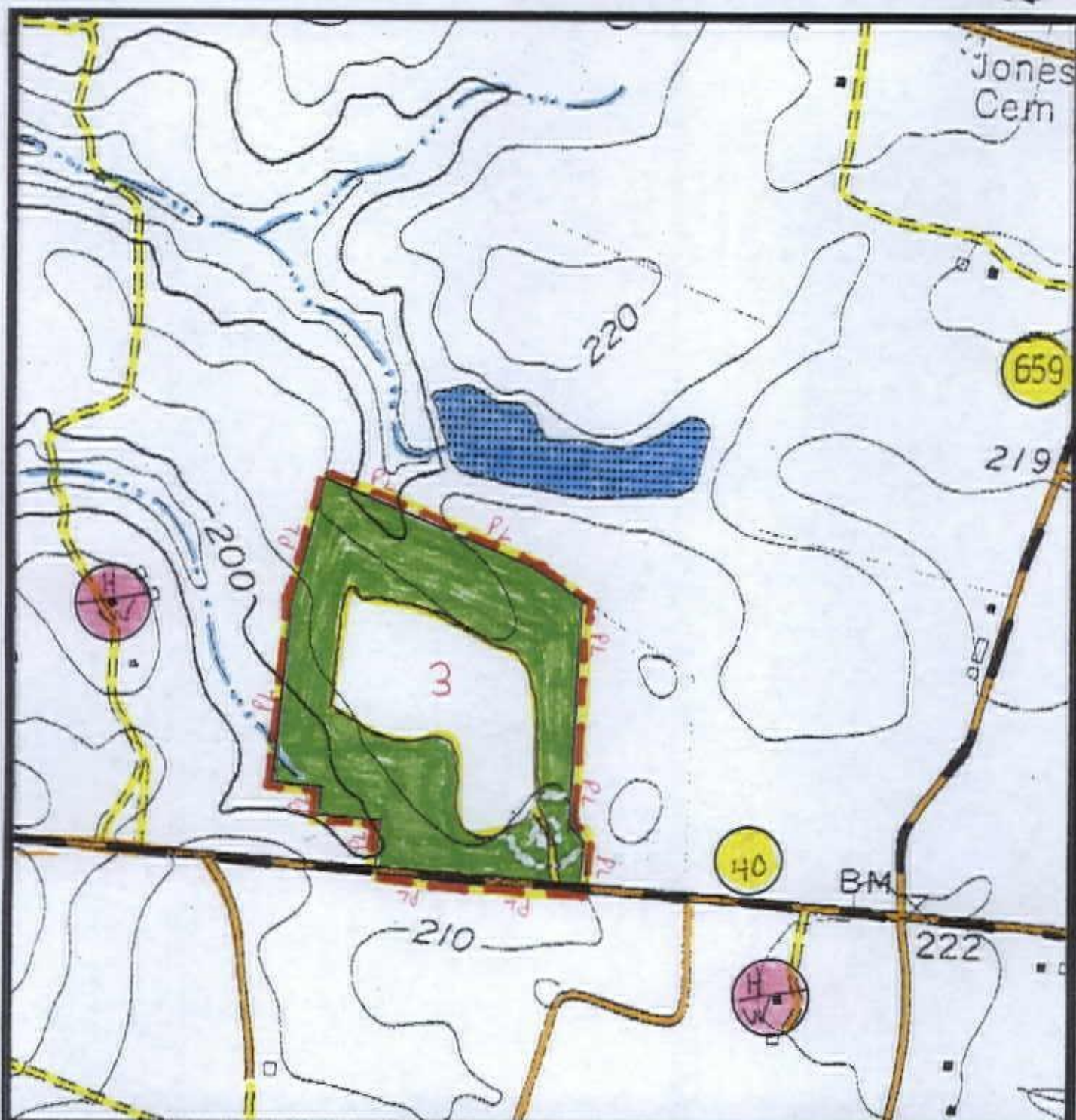
DWFWA 1-2

SITE PLAN

N
A

Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale:

1 inch = 660 feet

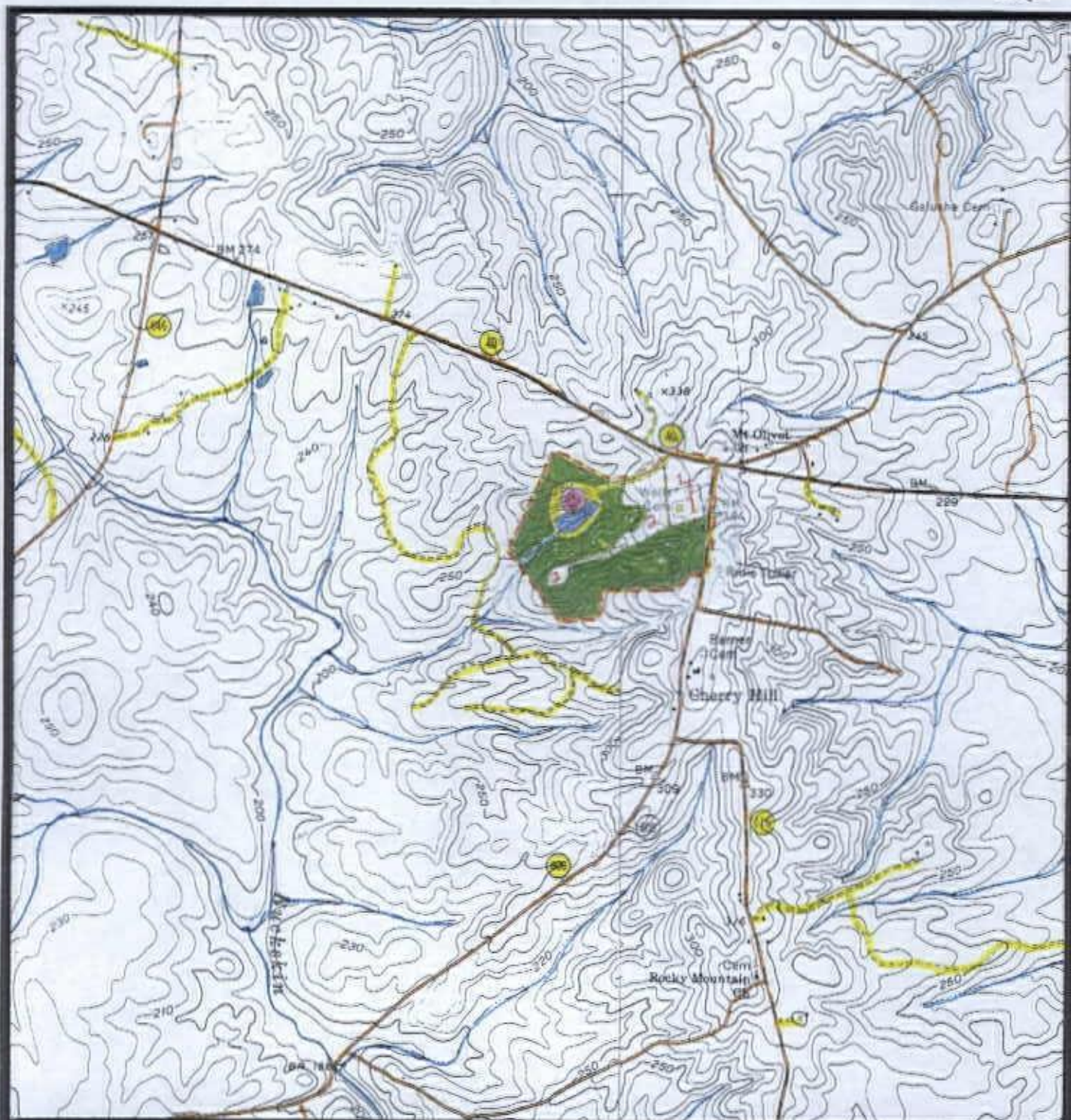
DWFWA 3

SITE PLAN



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale:

1 inch = 660 feet

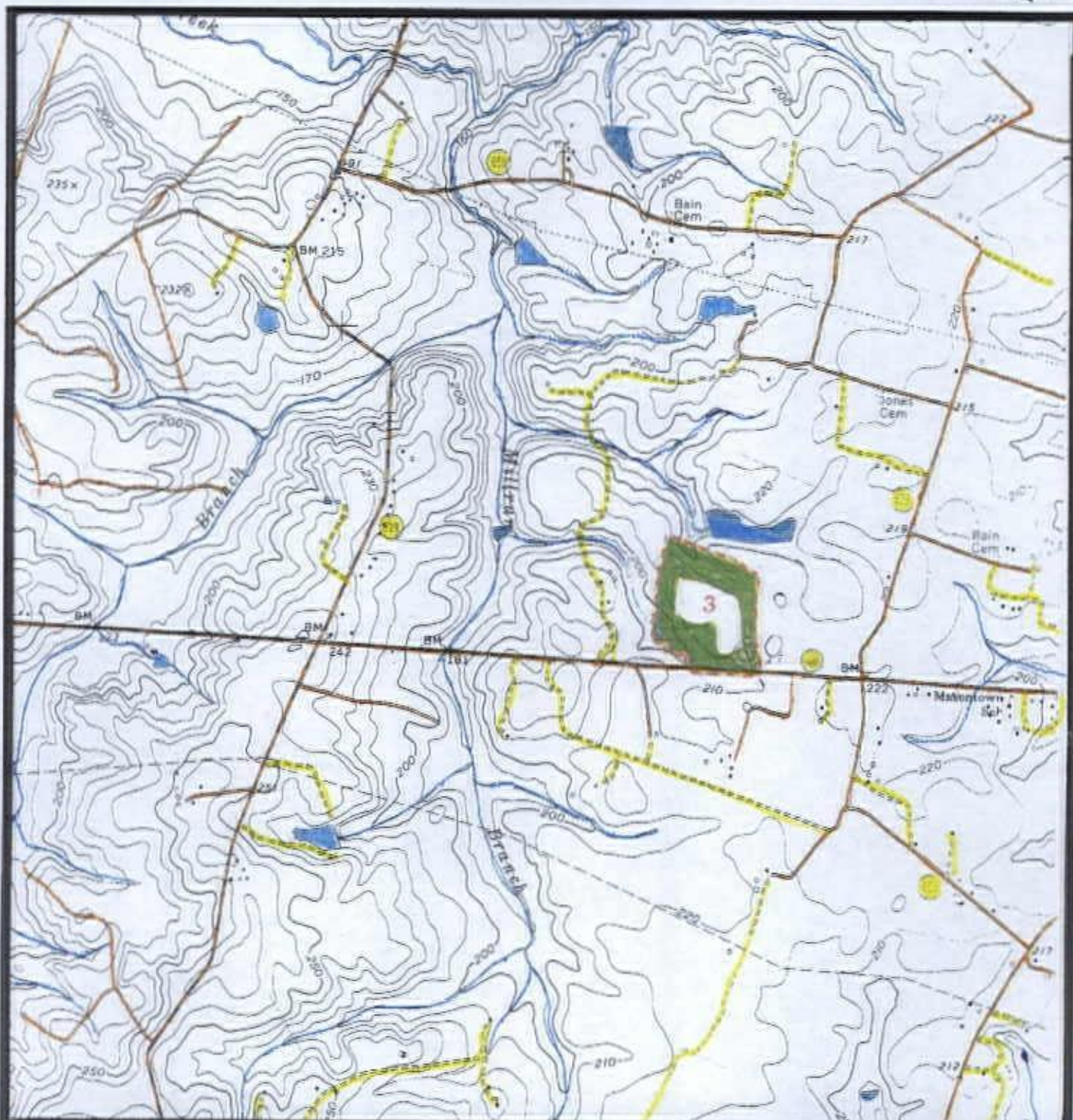
DWFVA 1-2

TOPOGRAPHIC MAP



Recyc SystemsTM Inc.

(Biosolids Land Application)



Scale:

1 inch = 660 feet

DWFWA 3

TOPOGRAPHIC MAP

